**CAP 6610, Machine Learning, Fall 2020**

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Each model was trained for 20 epochs on the whole train dataset. Following images are generated by both the models.

Graphical user interface

Description automatically generated

Figure :Images Generated by VAE

A close up of a logo

Description automatically generated

Figure :Images Generated by GAN

The images generated by VAE are blurry and fuzzy. Even though they have exact shape, they are same after the 10th epoch. While GAN starts generating clearer and sharper images at 15th epoch. Here is the comparison of images generated at every 2nd epoch of a GAN model.

A picture containing gauge, meter

Description automatically generated

**Further Plan**: Revamp the GAN model, and tweak the hyperparameters. Train for more epochs. Currently GAN performs better than VAE in terms of images generated.